

## Letter from Alexander Graham Bell to Mabel Hubbard Bell, May 4, 1917

Beinn Bhreagh, near Baddeck, Nova Scotia. 1917 May 4 Mrs Alexander Graham Bell 1331 Connecticut Avenue Washington D C Dear Mabel:—

Yesterday (May 3) John MacDermid completed the box for reflecting a beam of light under water; and last night I asked Casey to provide an electric bulb and wiring to the end of the Lab wharf, so that we could fasten the box to the wharf, have an electric light inside it and project the beam horizontally through the water.

Casey said he did not think it necessary, as an electric flashlight would do, and he produced one from his pocket. We held this flashlight in the box and observed the reflected beam from the mirror in the room.

It was a pretty dark night in spite of the presence of a little moonlight and after Casey had left it occurred to me that there was no reason why the experiment should not be tried at once, so at 2 A.M. this morning (May 4) I waded out into the water, near the "Get-Away", up to the knees, and allowed the box to rest on the bottom of the Bay with the reflecting mirror well under water.

The flashlight was suspended in the box not far above the surface.

Result :— The light was reflected under water in a horizontal path; and I could trace the beam in the water for a